



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JULY 31, 2000

OFFICE OF
ENVIRONMENTAL INFORMATION

Douglas H. Green
Piper, Marbury, Rudnick & Wolfe, LLP
1200 Nineteenth Street, N.W.
Washington, D.C. 20036-2412

Dear Mr. Green:

This letter responds to your July 12, 2000 letter, as well as follow-up telephone conversations, on behalf of a client requesting guidance regarding the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA). Specifically, you are requesting guidance about whether "headlap," a material comprised of granules produced from copper slag, qualifies for the articles exemption provided for at 40 CFR section 372.38(b).

According to your letter, headlap is incorporated into roofing products, including asphalt shingles or rolls, to serve as a UV light, weather, and hazard protectant. In particular, you state that headlap is applied to asphalt shingles to protect the shingle from weathering (*i.e.*, cracking or eroding from sun exposure and rain), to provide resistance to fire hazards generated by chimneys and other sources, and to prevent undesirable blanching or discoloring of the asphalt shingle from sun exposure. During a telephone conversation you stated that you believe headlap granules are applied to the surface of the asphalt shingles as the asphalt is drying.

Headlap is produced, according to your letter, by taking bulk copper slag¹ and milling and/or sorting it down to particle size ratios prescribed by the American Society for Testing and Materials (ASTM) in detailed specifications.² Your letter further states that the particle size and physical characteristic requirements in the product specifications are established, in part, to ensure that the headlap provides enhanced protection of the roofing product. Finally, you assert that none of the toxic constituents in the granules (zinc, copper or lead) are released under normal conditions of processing or use. According to your letter, headlap, which is hard, dense and nonporous, has physical properties that prevent the release of any toxic chemicals when the toxic chemicals in the granules are "processed" into the production of asphalt shingles. You contend

¹ You describe this slag as a mineral byproduct, containing zinc, copper and lead, that is obtained from copper smelters.

² In particular, you refer to ASTM Standard D 451-91 (Re-approved 1996), "Standard Test Method for Sieve Analysis of Granular Mineral Surfacing for Asphalt Roofing Products."

that, as a practical matter, the toxic constituents are chemically bound within the matrix of the granule. Based upon this background information you are asking for confirmation that the roofing granules qualify for the articles exemption, thereby exempting from threshold determinations and release and other waste management calculations any toxic chemicals contained in the granules.

Succinctly put, fluids and particles are not eligible for the EPCRA section 313 articles exemption. *See Toxic Chemical Release Reporting; Community Right-to-Know; Final Rule, 53 Fed. Reg. 4507 (Feb. 16, 1988).* Neither fluids nor particles are formed to a specific shape or design during manufacture. Granules are a type of particle.

Finally, based on statements made in your letter, one other point of clarification follows. In your letter you assert that none of the toxic constituents in the granules are released under normal conditions of processing or use. "Headlap - which is hard, dense and nonporous - has physical properties that prevent the release of any constituents, including zinc, copper or lead, when the granule is 'processed or used' during the manufacture of asphalt shingles. As a practical matter, the constituents are chemically bound within the matrix of the granule." Regardless of whether the toxic chemicals are bound within the matrix of the granule, toxic chemicals that are constituents of the granules are "released" if the granules are "released." The statute defines "release" as "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any hazardous chemical, extremely hazardous substance, or toxic chemical." (EPCRA section 329(8))

I hope this information is helpful to you in complying with the reporting requirements of section 313 of EPCRA. If you have any other questions, or desire further information, please call Larry Reisman, of my staff, at 202.260.2301.

Sincerely,

A handwritten signature in black ink, appearing to read "Maria J. Doa", with a stylized flourish at the end.

Maria J. Doa, Ph.D., Director
Toxics Release Inventory Program Division